



Australian Systematic Botany Society NEWSLETTER

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Historic Australasian Herbaria at Merseyside County Museum, Liverpool

John Edmondson (Keeper of Botany, Merseyside County Museum, Liverpool)

At the International Botanical Congress in Sydney, a poster display was presented on the historic collections of Australian plants which are now to be found in Liverpool, England. It was suggested by the Australian Liaison Officer at Kew that Australian systematic botanists might appreciate further details of these collections, so at the risk of boring those of you who saw the display at Sydney I have prepared a few notes on the more important of these collections.

Most of the early Australasian material was originally acquired by the Liverpool Botanic Garden herbarium, which was established around 1802 by John Shepherd, the first Curator of the Botanic Garden. Shepherd was a contemporary of William Roscoe, one of the founders of the Botanic Garden who had purchased the residue of J.R. Forster's herbarium from Halle, Germany in 1799 or early 1800. Roscoe was also associated with J.E. Smith, founder of the Linnean Society of London, who presented a large number of duplicates from his own herbarium to Roscoe during the heyday of Liverpool Botanic Garden in the first twenty years of its existence. To judge from the dates on the labels of specimens of garden origin, almost nothing was added to the herbarium after 1840 until its transfer to Liverpool City Museum in 1909 by the Liverpool Corporation which had assumed responsibility for the Botanic Garden in 1841. Although some minor collections have been accessioned by the City Museums prior to 1909, the acquisition of the Liverpool Botanic Garden herbarium marked the start of the Museum's development as a major holder of foreign herbarium material. These historic herbaria are listed here; in addition to these discrete collections, there is a scattering of Australasian material of varied origin throughout the herbarium and especially in the fern and seaweed sections of the collection.

1. The J.E. Smith Herbarium

Although the duplicates which Smith sent to Liverpool include a small number of specimens from the Linnaean Herbarium, the vast majority are from collectors who supplied material to Smith directly. A project to catalogue this material has recently been completed, and we have come across at least two hundred types of Australian species collected by at least eight different collectors. A large proportion of these types are the basis for species described by Smith himself, often in Rees's Cyclopaedia, though many other authors are also represented. The most numerous collection is that of John White, surgeon to the colony at Port Jackson, who sent material to Smith from 1786 to 1794. Also included are specimens said to have been collected by Arthur Phillip, the first Governor of New South Wales, who presumably exchanged specimens with White. These collections are usually localised "Port Jackson", although a number are unlocalised. Specimens from King George's Sound, Western Australia, collected by Archibald Menzies, form the second largest element in the Smith herbarium's Australian material; there is also a small amount of material collected by Jacques de Labillardiere which appears to have come to Smith from Menzies. None of the Labillardiere material shows any signs of having come from Sir Joseph Banks, but since it has been remounted by Smith any original labels it may have borne were presumably discarded. The Labillardiere material comes from Western Australia in the main, though some is merely labelled "New Holland". A few specimens from Sir Joseph Banks have turned up in the Smith Herbarium, and were collected from Port Jackson during Captain Cook's first circumnavigation; there is also a small collection of Robert Brown's from the Flinders expedition. Four

specimens are attributed by Smith to David Burton, the superintendent of convicts at Parramatta, who collected for Joseph Banks.

Other names in our catalogue, such as, Thomas Hoy and Rev. John S. Watts, refer to gardeners who received seed of Australian plants and raised specimens in England which were later sent to Smith. Two are signed "General Grose", whose identity is a mystery to me. There is also a quantity of cultivated plants whose seed may have originated from Australia, but which is undocumented or merely labelled "Hort." It will be necessary to attempt to match this with similar material in the main Smith herbarium at LINN if any progress is to be made with establishing the origins of this material.

The importance of the Smith herbarium at LIV lies in the fact that it duplicates material in the Linnean Society's herbarium in London, which is not available for loan. Plans are in hand for the loan of the entire "Liverpool Smith herbarium" to Kew, so that it can be photographed on microfilm. For this reason we will be unable to make any new loans from the Smith herbarium in 1983. Subsequently, botanists may find it more convenient to borrow Cibachrome prints of the type specimens from Kew, rather than requesting the originals from Liverpool.

2. The Forster Herbarium

This collection includes material gathered by J.R. & J.G.A. Forster on Captain Cook's second voyage around the world in 1772-1775, as well as exchange material from a number of botanists who were contemporaries of J.R. Forster. This includes collections from Thunberg (South Africa), O. Swartz (West Indies), P.S. Pallas (Siberia) and P. Forsskal (Arabia). So far as Australasia is concerned, Forster's own collections from New Zealand and New Caledonia are well represented, along with collections from Vanuatu, Tahiti, the Marquesas Islands and Tierra del Fuego. A sizeable proportion of the material that could be attributed to Forster was sent to Kew on exchange in 1885 (prior to the transfer of the Liverpool Botanic Garden herbarium to the City Museum), amounting to some 1320 sheets. Owing to the chaotic state of the herbarium much material not obviously attributable to Forster, but now accepted as belonging to his herbarium, remained at Liverpool, as well as some sheets which though clearly labelled "Forster" were overlooked. Although there is no Australian material in the Forster herbarium, we have a collection labelled "Swan River" in writing similar to that found on labels in the Forster herbarium but not attributable to the Forsters themselves. "Swan River" appears to be located somewhere in eastern Australia, since it includes species confined to the eastern seaboard and lacks any exclusively western Australian species. I would be grateful for any offers to try to establish the identity of the collector of this material.

3. The Mossman Herbarium

Although the collections of Samuel Mossman, made in the late 1840's from the coasts of New South Wales and Queensland as well as the North Island of New Zealand, do not appear to contain any type specimens, they are of interest on account of the degree of detail contained in the labels. Mossman recorded exact localities and (unusually for the period) quite precise habitat details. The collection was kept separately at Liverpool Botanic Garden, and was never incorporated into its herbarium. It is not known how the Botanic Garden acquired this collection, though it is possible that it was one of the collections sent from Kew in exchange for Forster's material. As well as flowering plants, the ferns are well represented.

4. The C.S. Parker Herbarium

Another voluminous collection was sent to Liverpool by Charles Sandbach Parker, a pupil of De Candolle who assisted William Roscoe in the preparation of his noteworthy monograph on Monandrian plants. Through its failure to attract the attention of taxonomists, it contains little of systematic value, and scarcely any work has subsequently been done on the collection as the specimens are neither localised nor dated. Parker also collected in North America, Guyana and the West Indies.

5. The F.J. Hutchison Herbarium

Hutchison was a pteridologist resident in Ceylon. He amassed a huge collection of ferns by means of exchange. The herbarium contains a large amount of unmounted duplicate material. The main collection within the scope of this article is that of Mrs G.B. Hetley, who made an extensive collection of ferns from New Zealand. There is also a significant quantity of material from New Caledonia which lacks any indication of the name of the collector; Hutchison probably received it from John Buchanan of Durban, Natal.

In conclusion, partly by way of an apology, I should mention that the City of Liverpool Museum received a fine set of duplicates from J.H. Maiden of Sydney Botanic Garden in 1899. Most of the specimens were collected by Joseph Maiden himself; they include a few types. I confess that we have no record of having sent any material to Sydney by way of completing this exchange, and it would be interesting to establish whether any plants were in fact sent. If not, I look forward to hearing from Sydney in due course!

CLADISTICS SYMPOSIUM

The Canberra Chapter has committed itself to organising a symposium on Cladistics within ANZAAS 1984. It is expected that it will be interdisciplinary. (It should be noted that a General Meeting of the Society will almost certainly not take place at ANZAAS 1984).

It is proposed to have:-

1. A structured introduction aimed at informing the uninitiated about the discipline and its application in taxonomic research and (hopefully) to set the background to understand the techniques and data analysis. We will invite speakers for this.

2. Some examples to see. We are calling for papers and poster papers.

We have been given Friday 18 May for the Symposium. More details next time.

Helen Hewson

Plantae Preissianae Types at Lund

M.D. Crisp, National Botanic Gardens, Canberra

Some readers of the ASBS Newsletter No. 34 probably were bemused to notice in the same issue an article by Karen Wilson (March 1983) and the title of a paper by myself to be presented at the ASBS meeting at ANZAAS in May, both concerning the same topic. This was the Plantae Preissianae (Pl. Preiss.) (Lehmann 1844-1848) and the corresponding types held at the University Botanical Museum in Lund, Sweden. Neither Karen nor I was aware until then that the other had an interest in this subject.

I first learned about the Preiss specimens at Lund from Bertil Nordenstam (1980 & pers. comm.) in 1981 while trying to track down an elusive type. Nordenstam is the Director of the Swedish Museum of Natural History in Stockholm. His article in *Taxon* mainly concerns South African types held in his own institution but contains a brief reference to the Preiss types at Lund. In September last year, after completing my posting to Kew as Australian Botanical Liaison Officer, I visited the Lund herbarium specifically to investigate the extent and nature of the collections there. I was extremely impressed with what I saw. As a result, I wrote the paper which was presented at ANZAAS in Perth last May. Jim Armstrong kindly read the paper because I was unable to attend. I am currently writing a more detailed paper on the same topic for *Taxon*.

Briefly, my conclusions are as follows. I agree with Karen that the set of Preiss specimens at LD is the most complete in any herbarium. Moreover, I can confirm Sonder's claim that the LD collection is the "original" or standard reference set of specimens for the publication Pl. Preiss. Finally, I believe that, other things being equal, specimens at Lund should be chosen as lecto-types of names from Pl. Preiss.

In support of these conclusions there are several lines of evidence. Karen has already mentioned the correspondence between Sonder and Andersson over the sale of the Lehmann herbarium. Nordenstam has kindly supplied me with copies of 8 letters which Sonder wrote to Andersson between March 1860 and April 1861. The original letters are held in the archives of the University of Stockholm. Even more generously, Nordenstam translated the relevant parts of the letters. Despite Sonder's bias in the matter (he wanted a commission for the sale of the herbarium) and his tendency to exaggerate, he clearly established that this was the "original" and most complete set of Pl. Preiss. specimens. Sonder emphasised that the phanerogams were annotated in the hand of the authors.

While in Lund I located specimens of taxa described by each of the authors who contributed to Pl. Preiss. Virtually all were annotated in the hand of the authors. The original labels were sometimes written by Preiss himself and sometimes in an unknown hand. The latter was probably a scribe employed by either Preiss or Lehmann.

The Lund herbarium still has Agardh's copy of Pl. Preiss. It was Agardh who had purchased the Preiss herbarium from Lehmann's widow and brought it to Lund. In this copy of Pl. Preiss., Agardh had marked all taxa represented by specimens in Lund. Nearly all of the taxa in the publication are marked, with the exception of the cryptogams, the Xanthorrhoeaceae and very few other taxa. On checking a sample of taxa in the herbarium, I found this to be a mostly accurate guide to the specimens now held at Lund.

I have a particular interest in the types of the tribe *Mirbelieae* (*Fabaceae*). Carl Meissner was the author of the *Fabaceae* in *Pl. Preiss.* He described about 80 taxa for which he cited 104 Preiss collections. Of those 104 types, I found 102 in Lund, all annotated by Meissner. Other herbaria come nowhere near Lund in their representation of Preiss types of *Fabaceae*. The New York Botanical Garden (NY) holds Meissner's personal herbarium but I could find only 86 of the 104 types there. However, the two types missing from LD are in NY. I have not seen Preiss types annotated by Meissner in any other herbarium, so I doubt that genuine protologue material exists outside LD and NY. Numbers of non-annotated Preiss types of *Mirbelieae* in some other herbaria are 64 in Geneva (G), 37 in St Louis (MO), 20 in Kew (K) and 6 in Florence (FI).

Meissner also cited Drummond collections in *Pl. Preiss.* He saw these specimens in Shuttleworth's herbarium which is now in the British Museum (Natural History) (BM). Lund has a good set of Drummond specimens but unlike those at BM and NY, none have been annotated by Meissner. Although BM has a complete set of Meissner's types of *Fabaceae* collected by Drummond, some of his *Proteaceae* types do not seem to be there. I made an extensive search for *Grevillea* types there on behalf of Don McGillivray but found none.

The size and quality of the Preiss types in Lund seem variable by comparison with specimens in other herbaria. Detailed comparisons of Meissner's types of *Mirbelieae* in LD with those in NY showed that in most cases, the specimens in LD were better. On the other hand, the types of *Asteraceae* and *Tremandraceae*, both families written by Steetz in *Pl. Preiss.*, are better in Steetz's personal herbarium in MEL (P. Short, pers. comm. and my own observations). Apparently the authors of *Pl. Preiss.* had different ideas about how large a specimen they should keep for themselves and how large a specimen they should leave to Lehmann. This is consistent with Sonder's comment to Andersson (in litt., 15 April 1861) that much of the herbarium was presently only as small specimens. However, this remark should be taken with a grain of salt as the whole tone of the letter is one of bitter disappointment. Sonder had just missed out on a fat commission for the sale of Lehmann's herbarium.

This raises the question of exactly how the Preiss collection was divided up and who saw which specimens when. In the preface to *Pl. Preiss.* (Vol. 1, pp. v-vi), Lehmann made it clear that when Preiss returned to Europe he handed over to Lehmann his collections which had not yet been distributed into families, this being no mean task: "Ex quarum ingenti multitudine, quae vel secundum familias distribui haud brevi temporis spatio potuerat, ...". Lehmann went on to say that he then enlisted various authors to contribute treatments of different families to *Pl. Preiss.*, but he did not say exactly how the specimens were handled. It would appear that only some of the material under each Preiss number was sent to each author. This is the material which has been annotated by the authors. The remainder of the material, which is not annotated, and which presumably was not seen by the authors, was apparently distributed separately. Perhaps these non-annotated sets were retained by Preiss for sale; perhaps they were disposed of later by either Lehmann or Preiss.

These questions can only be answered with certainty from correspondence between the people involved. As suggested by Karen Wilson (March 1983), Preiss's correspondence would be of immense value if it could be found. Lehmann's correspondence would be of equal value. Fortunately I have recently obtained copies of ten letters written by Lehmann to F.A.W. Miquel between 1842 and 1845, all concerning *Pl. Preiss.* Miquel was a major contributor to *Pl. Preiss.*, so these letters may give a major insight into how the Preiss collections were handled. I have yet to get these letters translated.

Irrespective of any new information contained in this correspondence, it is already clear that the Preiss specimens at Lund comprise the most complete set known and the only set proven to have been seen by all the authors of Pl. Preiss. Thus the specimens in Lund have at least equal status as types with those from the authors' own herbaria. They should always be considered when names from Pl. Preiss. are lectotypified.

Contemporary botanists have varied in their choice of lectotypes from Preiss material. I have heard the view that all duplicates of a given Preiss number may have been seen by the authors of Pl. Preiss. and that therefore all have equal status as types. In my opinion, this view is no longer tenable. Even so, I am not aware of any Preiss specimen which has been chosen as a lectotype but which had not been annotated by the original author. Some botanists have chosen specimens in the original authors' personal herbaria while others have chosen specimens in Lund. Both procedures are acceptable under the International Code of Botanical Nomenclature. However, in light of the new evidence that the collection at Lund was regarded as the standard set for the publication Pl. Preiss. (Sonder in litt., 3 March 1860 and 9 July 1860), I would suggest that a different approach should be used in future. Other things being equal, e.g. if the specimen in Lund agrees as closely with the original description as any other annotated specimen, then the specimen at Lund should be chosen as a lectotype.

The head of the Botanical Museum at Lund, Sven Snogerup, and his staff were extremely kind to me during my visit. I was accommodated in a comfortable room in the attic of the Museum at a very reasonable cost. Specimens at Lund are available for loan, although it should be borne in mind that the staff are few and their capacity to service large requests may be limited.

I am grateful to Alex George for his comments upon this manuscript.

References

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- Nordenstam, B. (1980). The herbaria of Lehmann and Sonder in Stockholm, with special reference to the Ecklon and Zeyher collection. *Taxon* 29: 279-291.
- Wilson, K.L. (March 1983). Plantae Preissianae Specimens. Austral. Syst. Bot. Soc. Newsletter 34: 5-6.

Report from the Bureau of Flora and Fauna

Volume 22 of the Flora of Australia is now with the publisher and should be available by the end of the year. Like Volume 8 it contains many families, in this case 17, and is relevant to most parts of Australia.

Manuscripts for the next Volume, 4, are mostly completed and are now being edited. Preparation of manuscripts for later Volumes is proceeding well.

The Flora Section is currently running on a depleted staff. Alison McCusker is on temporary transfer within the Department and will be away for nearly six months. Arthur Chapman is progressing very successfully on his European tour, having turned up literature in some institutions that even the staff had been unaware of. He is adding considerably to the Australian Plant Name Index.

Sales of the Flora at 23 August were:

Volume 1	2 983 casebound	2 358 softbound
Volume 8	1 323 casebound	668 softbound
Volume 29	1 635 casebound	785 softbound

The Bureau has a new telephone system incorporated with the Departmental system. The number for general enquiries is (062) 46 7500. Individual numbers in the Flora Section are 46 7491 (Alex George), 46 7497 (Helen Hewson), and 46 7482 (Arthur Chapman).

Alex George
Acting Assistant Director (Flora)

Notes from Council Meeting

Canberra - 27 July, 1983

1. CONSTITUTION - It was decided to form a small committee convened by Rod Henderson to consider results of the voting on the present proposed amendments to the constitution (as in Newsletter No. 35), to propose to council other amendments which seem necessary and to investigate incorporation of the Society. In the interim the constitution, incorporating the changes resulting from the proposed amendments presently before the membership, will be printed as a loose leaf item in the ASBS Newsletter.
2. TREASURER'S REPORT - Council's attention was drawn to an error in the summary of the Treasurer's report for part of the financial year of 1983 as published in Newsletter 35: 12 - in the debit column the bank balance (incl. Term Deposit Account) should read \$7068.53 (not \$6856.53).
3. NEWSLETTER - On the Treasurer's advice (Newsletter 35: 10) it was decided to discontinue sending overseas Newsletters by airmail unless the members are prepared to pay extra to cover the costs. The Newsletter for the Australian Botanical Liaison Officer will be sent airmail.
4. SUBSCRIPTIONS - The Perth General Meeting determined the 1984 subscription to be \$15 (Newsletter 35: 18). It was decided to set the subscription rates as follows: regular membership \$15, reduced to \$13 if paid before 31 March, full-time students \$10.
5. NOMINATIONS FOR VACANCIES ON COUNCIL - so that members are aware which councillors are eligible for re-election, those who are not eligible and those who do not wish to stand for re-election, the notice calling for nominations will in future include an indication of the present Council members.
6. ASSISTANCE FOR TRAVEL TO MID-TERM COUNCIL MEETINGS - A total of 38 respondents was received to our questionnaire; the results are summarised in the President's report (Newsletter 35: 9). Although this is only c.10% of the Society's membership the Council can take the results as a guide. In general decisions as to whether support will be given will be left to the discretion of the Council. Support will only be given when no other assistance is available and every attempt must be made to obtain assistance from other sources including the councillor's institution (if applicable). It was suggested that no more than 5% of the Society's current assets could be spent on any meeting. In organising any mid-term meeting the Secretary must consult with the Treasurer before committing any funds. It was noted that by arranging the

date of this meeting to suit all Councillors it was again possible to hold the meeting with no expense to the Society.

7. NANCY BURBIDGE MEMORIAL LECTURES - These lectures will be published in the ASBS Newsletter as a matter of policy in future.

J.G. West
Secretary

Chapter News

MELBOURNE CHAPTER

After a significant lapse in a regular meeting program, the Melbourne Chapter has again organised monthly lectures (see below). Two themes have been adopted as immediate and representative of local interest.

Eucalypts are enjoying particular notoriety and the talks by Julie Marginson and Pauline Ladiges stimulated spirited discussion. These talks had been presented to Perth ANZAAS, a venue few Victorian members were able to attend and with little opportunity for discussion.

Cryptogams have suffered neglect in many herbaria. Victoria enjoys a complement of capable cryptogamic taxonomists of whom only Rex Filson is employed by the Herbarium. The responsibility for cryptogamic collections does not appear to have been shouldered by any institution, and the burden rests largely with individual taxonomists. The progress of taxonomy and the curation of collections are inseparable particularly when long-term supervision of loans and fumigation of material is required. Current research and curation constitute the second theme.

Stephen Forbes and Philip Short chased *Erigeron pappocromus* Labill. sensu lat around Tasmania for three weeks in January/February. An ambitious attempt on the nominal type locality, Mt La Perouse, was reduced to a Hill One scramble as the afternoon progressed, despite Mt Anne-tested legs. The same combination, in reverse role, is off to chase *Gnaphaliinae* in Western Australia for October, with Laurie Haegi replacing Stephen in November. Barry Conn spent about three weeks (May/June) collecting in the Mareeba/Herberton area (Queensland). He was generously assisted by John Clarkson and John De Campo (Botany Branch, D.P.I., Mareeba). Apart from poor navigation which resulted in an unplanned night on Mt Derri and no *Prostanthera*, the trip was very successful.

Recent visitors include Mike Crisp photographing MEL types, attending the local chapter meeting and looting our rich endemic flora, Bill Barker working on problems and omissions in *Hakea* for the new edition of Black's flora and Robyn Barker finalising problems in the revision of *Acanthaceae* for Australia.

The forthcoming visits of Miss Margaret Stones and Prof. William Stearn should be noted in the calendar.

CALENDAR

Wednesday 20 July, 1983	8.00 p.m.	"Cladistic and biogeographic study of the peppermint eucalypts in south-eastern Australia" Pauline Ladiges, University of Melbourne
Wednesday 24 August, 1983	8.00 p.m.	"Geographic variation in <i>Eucalyptus alpina</i> Lindl." Julie Marginson, University of Melbourne
Tuesday 27 September, 1983	8.00 p.m.	"Red algae (and where to put them)" Gerry Kraft, University of Melbourne
*Thursday 6 October, 1983	10.30 a.m.	Exhibition and discussion Miss Margaret Stones, Royal Botanic Gardens, Kew
Wednesday 26 October, 1983	8.00 p.m.	"Leaf spotting fungi (and where to put them)" Robert Park, LaTrobe University
*Thursday 10 November, 1983	8.00 p.m.	Lecture Prof. William Stearn F.L.S., formerly British Museum (Natural History)
Tuesday 22 November, 1983	8.00 p.m.	"A history of <i>Eucalyptus</i> " Neil Hallam, Monash University

* The visits of Margaret Stones and Prof. William Stearn have been organised through the Friends of the Royal Botanic Gardens. Tickets for the discussion or lecture are \$4.00 from the Ticket Secretary C/o MEL. Prof. William Stearn will be at MEL on Friday, 11 November, for an informal talk with botanists.

Stephen Forbes, Convener

CANBERRA CHAPTER

The Canberra Chapter has been busy with several activities.

We attempted to lobby to have the Lae Herbarium "rescued". Our attempts proved to be something of a comedy of errors. The Australian Development Assistance Bureau shared our concern but informed us that "it is the sovereign right of the PNG Government to define its own economic and social development needs and priorities and then to decide how best its total resources should be spent". The Department of the Prime Minister, Papua New Guinea, told us that they "share our concern for the importance and need to maintain the high regard attributed to the Baiyer River Sanctuary and the preservation of the country's wildlife". In spite of all that we have learned that the Lae Herbarium is to become part of UNITEC, a tertiary education institution. Meanwhile Michael Galore has resigned and Ted Henty is Acting Assistant Director.

We have run several talks. In April, Jim Armstrong discussed "Pollination mechanisms and breeding systems in the tribe Boronieae, family Rutaceae", as a trial for his ANZAAS paper. In May, Ian Telford gave an illustrated talk on "The Wonders of an Oceanic Archipelago - Hawaii". In June, Alex George presented an illustrated talk on our Indian Ocean Territories - "A view of Cocos".

(Keeling) and Christmas Islands". In July, we held our General Meeting. Our elections resulted in the election of Helen Hewson (Convener), Ian Telford (Secretary) and George Chippendale (Committee Member). Afterwards we had a dinner which included genuine Filet Gumbo prepared by our gourmet chef Ian Telford. (For your information Filet is derived from *Sassafras albidum* and Gumbo is derived from *Hibiscus esculentus*). After dinner we trundled(?) across the road to the Academy of Science to watch the film Adventure South. Adventure South was a report on the successful expedition to Heard Island last summer. Seeing the film was an amazing experience few of us will forget. Do see it if you get a chance. The Bureau of Flora and Fauna was an associate member of the expedition. They were delighted to have an excellent plant collection handed over to them on the night.

We have discussed with the Bureau of Flora and Fauna a potential program to map the flora of the ACT. A Sub-Committee has been formed but the program is still at the discussion level.

We have also committed ourselves to organising a symposium on Cladistics within ANZAAS 1984.

Helen Hewson, Convener

BRISBANE CHAPTER

PRESENTATION AND ADDRESS

Dr Len Webb was the recipient of the ANZAAS Mueller Medal for 1983 but was unable to be in Perth to receive the medal.

The Royal Society of Queensland has set aside its October meeting, for a local presentation. At the same time, Len will present the address for the evening during which he will trace some of the important influences on his scientific career as he embraced taxonomy, then ecology and conservation.

ASBS members are invited to attend this meeting to be held at Kindler Theatre, Queensland Institute of Technology, Brisbane on 31 October, 1983 at 8.00 p.m.

RAINFOREST WORKSHOP

'The past, present and future of Australian rainforests'
Griffith University, Brisbane, 2-4 December, 1983

ASBS members are invited to attend the above workshop. The organisers would welcome papers on any aspect of rainforest research, including papers outlining the present state of knowledge of a particular component of the biota.

For further information contact Dr Aila Keto, C/- Rainforest Conservation Society of Queensland, 15 Colorado Avenue, Bardon. Q. 4065. Phone 369 6352.

Laurie Jessup, Convener

Constitutional Amendments

The results of membership voting on proposed changes to the Constitution and Rules of ASBS as outlined in Newsletter 35, June 1983, are as follows. The Constitution rules that any change of Constitution or Rules shall be determined by a majority vote. Note that 63 ballot papers were returned but not all respondents voted for all proposals.

Proposal 1	Accepted	(100% of votes cast were for acceptance - 61/0)
Proposal 2	Accepted	(100% of votes cast were for acceptance - 61/0)
Proposal 3	Accepted	(90.5% of votes cast were for acceptance - 56/6)
Proposal 4	Rejected	(87.1% of votes cast were for rejection - 8/54)
Proposal 5	Rejected as	Proposal 9 rejected
Proposal 6	Rejected	(91.2% of votes cast were for rejection - 5/52)
Proposal 7	Accepted	(88.5% of votes cast were for acceptance - 54/7)
Proposal 8	Accepted	(81.7% of votes cast were for acceptance - 49/11)
Proposal 9	Rejected	(75.4% of votes cast were for rejection - 14/43)
Proposal 10	Rejected	(78.9% of votes cast were for rejection - 12/45)
Proposal 11	Accepted	(62.9% of votes cast were for acceptance - 12/45)

An updated copy of the Constitution and Rules incorporating the above changes will be forwarded to financial members with the next Newsletter.

J. West, Returning Officer
per R. Henderson, Convener, Constitution Sub-Committee

REQUEST FOR BACK ISSUES OF THE NEWSLETTER

I would like to ask if anyone has early issues of the ASBS Newsletter that they no longer need. I placed my copies in the library at the Western Australian Herbarium and now wish to make my set complete again. The numbers required are 1 to 11 inclusive, 13, 14, 15 and 19.

Alex George, Bureau of Flora and
Fauna, G.P.O. Box 1383,
Canberra, A.C.T. 2601

Letters to the Editor

A member's impressions of the recent AIBS meeting

"From the air the patchwork of small fields surrounding the city continued in all directions flat, flat and more flatness. On the ground we were met with temperatures in high 90's (yes, we have to think in furlongs, fahrenheit and fortnights again) and humidity over 80%. This was Grand Forks, North Dakota and straight from mid-winter Canberra it was a bit of a shock for us let alone our little 2½ month old Kim. We had come to this part of the U.S. to attend the American Institute of Biological Sciences Meeting (7-11 August). Several biological sciences societies meet together annually for a week of

symposia, contributed papers and poster sessions, a lot of communicating and a good deal of fun socialising. The societies involved this time were American Bryological and Lichenological Society, American Fern Society, American Society of Plant Taxonomists, Association for Tropical Biology, Botanical Society of America, Canadian Botanical Association, Ecological Society of America, International Society of Ecological Modelling, Phycological Society of America, the Society of Systematic Zoology and the Willi Henrig Society. This year's meeting was attended by four biologists from 'down under' - Bryan Barlow near the end of a 3 month visit to the U.S., Surrey Jacobs on his way to begin his term as the ABLO and Ian Noble and myself just beginning a 4 month period in this country. A fifth Australian attended some ecological and taxonomic sessions and although a little young to participate was able to contribute one batch of hiccups and a few amazingly appropriate aah's.

The programme for the week was very full with symposia, usually jointly sponsored and organised by at least 2 societies, and many contributed paper sessions within each Society programme. Anyone with interests in cladistics and breeding systems/pollination biology were in deep trouble with concurrent sessions. There are always scheduling problems, but this is one clash I consistently meet.

I found the contents of the symposia interesting and useful, particularly as many people were presenting very recent work, although of course, some produced work long since published and the meeting had its share of bad papers. Some of the symposium topics relevant to ASBS members were:

Cleistogamy: its ecology and evolution

Developmental physiology of flowering

Fruits and frugivores: interactions of dispersal and foraging strategies

Pollination biology

Homology in modular organisms: concepts and consequences

What is a natural classification?

Phylogenetic systematics and speciation

Contemporary issues in biogeography

Phylogenetic analysis of polymorphic molecular characters

In addition more specialised sessions were held on various aspects of the Asteraceae, Poaceae and Cyperaceae.

The scope of work presented in the pollination biology area gave us an idea of the taxa and techniques being used in North America at the moment. In the cladistics field it was useful to be able to assess the capability, applicability and relevance of various computer packages now available. It is interesting that similar phylogenetic and biogeographic patterns are emerging in several plant and animal groups in North and Central America and Australia.

Other than the obvious academic merit of the whole meeting it has, like most large meetings, an important role in getting workers together. For me it was great for meeting people and it was also clearly extremely valuable for personal communication between U.S. workers. Many people had driven to the meeting doing field work en route.

With our country being a similar size to the U.S. (and our air fares considerably higher) we have the same problems in communication and I feel we are in need of a meeting such as AIBS. It really is time several (if not all) of our biological societies met together on a regular basis. Each society

could hold their own business meetings and relevant symposia and contributed paper sessions as well as being involved in joint interdisciplinary symposia. The time and place can be selected to suit all parties, with special concern for those wanting to do field work. ASBS Council is already taking an initiative in this direction.

Even if it was in the boon docks of U.S.A. the Grand Forks AIBS meeting was well organised on a pleasant University campus. One thing for sure we certainly weren't the only ones on their first visit to Grand Forks, North Dakota."

Judy West

Rare Western Australian Flora

I read with dismay Steve Hopper's paper in *Austral. Syst. Bot. Soc. Newsletter* 35 (June 1983). I agree that the rare flora in Western Australia should be protected but the lengths that the Department of Fisheries and Wildlife are going seems unnecessary for what would appear in some cases, to be minor variants of a species.

O.K. protect the species but where does it stop after that. You might find a species of Eucalypt that has a wide range but in a small area east of Moora, varies from the normal in fruit size. Do we declare that a rare and endangered race of *Eucalyptus*.

This topic opens up the old Pandoras box of what is a species and what is not and gives the botanical splitters no small legal power in the land. I imagine that there isn't one piece of unploughed land on the continent that the department couldn't confer special protection on if enough research was done to find the odd rare genotype.

I also think that looking for rare plants may be turning into "jobs for the boys". As you may understand, I hope that some common sense prevails when declaring rare plants.

Andrew Mitchell

BARON SIR FERDINAND VON MUELLER'S GRAVE

S. Forbes, National Herbarium, Melbourne

Few links with Ferdinand von Mueller remain as his house in Arnold Street, South Yarra, and his Herbarium on the Domain have been demolished. Naturalists and scientists wishing to pay their respects or assuage curiosity concerning the Baron, have attended various memorial services held at his grave. This may be found near the south-west (Alma Road and Hotham Street) corner of the St. Kilda Cemetery. The grave is surmounted by a tall column of grey, polished Harcourt granite topped by an urn inset with a medallion bearing an image of the Baron.

During a recent visit Jim Willis, Jim Ross, Stephen Forbes, Margaret Corrick and party noted that the inscription on this memorial had deteriorated to such an extent that it was difficult to read.

Regilting seems appropriate and the National Trust of Victoria appears to have accepted this as a project. ANZAAS (the body responsible for erection of the monument) and the Victorian Field Naturalists Club (the body that undertook maintenance of the site for some decades) are to be consulted.

The inscription was unveiled on the 26 November, 1901. It reads as follows:

"Dedicated by Co-workers in the Field of Science
To the Memory of
Baron Sir Ferdinand von Mueller, K.C.M.G., M.D., F.R.S., & c.
Born at Rostock, Mecklenburg, June 30th, 1825.
Government Botanist of the State of Victoria, 1852
until his death, Oct. 10th, 1896;
Director of the Botanic Gardens 1857-1873.
Whose erudite works on the flora of Australia have
secured him immortal fame amongst the renowned
phytologists of the 19th Century."

"Despair not; there are still noble hearts that
glow for the august and the sublime."
"Blessed are the pure in heart for they
shall see the Lord."

Further Reading

- Daley, C. (1924). Baron Sir Ferdinand von Mueller. *Vict. Hist. Mag.* 10: 23-75.
Willis, J.H. (1957). Pilgrimage to Baron von Mueller's Grave. *Vict. Nat.* 74:
110-114.

JOHN T. WATERHOUSE (1924-1983)

John Waterhouse, Senior Lecturer in Botany and Director of the Herbarium (UNSW) at the University of New South Wales, and a foundation member of ASBS, died suddenly at his home on the night of 1 April, 1983, aged 58 years.

John obtained a Bachelor of Science with Honours in Botany from the University of Sydney in 1946, and, apart from two short periods on the staff of the Botany Department, University of Sydney, spent the next decade and a half on the land in the north west of the state. Throughout this period he maintained and developed his knowledge of the native flora, and on leaving the land in 1962 he joined the staff of the Botany School at the University of New South Wales for studies on the Xanthorrhoeaceae, and in 1972 a Master of Science in Pure and Applied Taxonomy from the University of Reading.

John had particular interests in the Myrtaceae and the woody monocotyledons, and was nearing the completion of a collaborative project with Mary Hindmarsh to produce a key on vegetative characters for the identification of rainforest species south of the Macleay River. The last of these projects should be brought to a publishable stage shortly, and it is also hoped to publish his presidential address to the Linnean Society of New South Wales entitled, "The phylogenetic significance of Dracaena-type growth in monocotyledons".

In 1980 John embarked upon an intensive floristic survey of the Magela Creek catchment and the surrounding areas between the East and West Alligator Rivers, Northern Territory. He collected throughout the full cycle of the wet and dry seasons, amassing a substantial set of specimens and observations on the phenology of these little studied communities.

John has had a great impact on the teaching of botany in general, and taxonomy in particular, at the University of N.S.W. He raised undergraduate taxonomy above the level of plant identification, introducing a special third year unit on the principles and methods of plant taxonomy. Over the years he

devoted a great deal of effort to expanding the collection held by the herbarium, and to improving the level of its curation. In 1980 he registered the herbarium, and recently obtained a special development grant to enlarge the accommodation both for the collection and for the associated staff and students. This work was already in hand at the time of his death, and should be completed early in June. The enlarged herbarium will be officially opened and dedicated to John's memory during a social get-together of his friends and colleagues on Tuesday, 28 June.

Only the week before he died John saw 'Waterhousea', the myrtaceous genus named in his honour (Hyland, in press), in print in the 'Rainforest Walk' pamphlet just published by the Royal Botanic Gardens, Sydney. He was looking forward to an early retirement at the end of next year, which would free him of the routine pressures of a teaching position and enable him to devote more time to research. The Australian botanical community is much the poorer for his passing.

Vale John, Christopher Quinn

1983 CHAH MEETING

The eleventh annual meeting of the Council of Heads of Australian Herbaria will be held in Melbourne on 26-27th October. ASBS members who have any items for consideration at this meeting should forward them to their respective State Herbarium Director.

AUSTRALIAN RESEARCH GRANTS SCHEME

The minister for Science and Technology, Mr Barry Jones, has recently informed Directors of Herbaria that their institutions are now eligible for funding under the Scheme.

Recent Publications

Flowering Plants in Australia: Edited by B.D. Morley and H.R. Toelken, 416 pp. 230 colour and line illustrations. Adelaide: Rigby, 1983. Price: \$65.

This publication provides an up-to-date overview of native and naturalised families of cycads, gymnosperms and angiosperms. Each family description gives information on distribution throughout the world as well as Australia, many featuring distribution maps. Detailed keys for each family enable the reader to identify genera, and provide information on the distribution of each genus and the number of species. The diagnostic features of each family are given in detail to aid identification, and there is an account of the families' systematic affinities. There are also notes on economic and ornamental uses, and the uses by Aborigines, of each family. References are given for further reading.

Flowering Plants in Australia is beautifully designed and illustrated and will be a valuable reference book to all lovers of Australian flowering plants.

FORTHCOMING CONFERENCES AND MEETINGS

5th ANZAAS Congress: Canberra, 14-18 May 1984.

Further information: ANZAAS, Box 873, GPO, Sydney 2000.

4th International Conference on Mediterranean Ecosystems: University of Western Australia, Perth, 13-17 August 1984. Further information: MEDECOS, Botany Department, University of Western Australia, Nedlands, W.A. 6009.

Ecological Society of Australia: Open Forum on Ecological Research and 1984 Proceedings Symposium - "Are Australian Ecosystems Different?" Sydney, 27-29 August 1984. Papers for the Open Forum may be on any research topic of ecological interest. Contributions to the Proceedings Symposium will be reviewed. For further information contact Mart Westoby, Biology, Macquarie University, North Ryde, N.S.W. 2113.

The Society

The Australian Systematic Botany Society is an association of over 300 people with professional or amateur interest in Botany. The aim of the Society is to promote the study of plant systematics.

Membership

Membership is open to all those interested in plant systematics and entitles the member to attend general and chapter meetings and to receive the Newsletter. Any person may become a member by forwarding the annual subscription to the Treasurer. Subscriptions become due on the 1st January.

The Newsletter

The Newsletter appears quarterly and keeps members informed of Society events and news, and provides a vehicle for debate and discussion. In addition original articles, notes and letters (not exceeding ten pages in length) will be published. Contributions should be sent to the Editor at the address given below, preferably typed in duplicate and double-spaced. All items incorporated in the Newsletter will be duly acknowledged. Authors are alone responsible for the views expressed. The deadline for contributions is the last day of February, May, August and November.

Notes

- (1) The deadline for the next Newsletter is 30th November.
- (2) ASBS Annual Membership is \$8 (Aust.) if paid by 31st March, \$10 thereafter. Please remit to the Treasurer.
- (3) Advertising space is available for products or services of interest to ASBS members. Current rates are \$30 per full page, \$15 per half page. Contact the Newsletter Editor for further information.

Mailing List

All address changes should be sent to the Treasurer or the Editor.

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